

Title (en)

HOLLOW NICKEL SHAPES BY VAPOR DEPOSITION

Title (de)

HOHLE NICKELFORMEN DURCH DAMPFABSCHIEDUNG

Title (fr)

PROFILES DE NICKEL CREUX PRODUITS PAR DEPOT EN PHASE VAPEUR

Publication

EP 1664372 A4 20080910 (EN)

Application

EP 04761632 A 20040806

Priority

- CA 2004001468 W 20040806
- CA 2437343 A 20030808

Abstract (en)

[origin: CA2437343A1] A method and apparatus for producing a nickel shape or shell employs nickel vapour deposition onto the inside surface of a closed, multi-part mandrel. The closed multi-part mandrel eliminates the need for a separate deposition chamber and the nickel vapour deposition creates a nickel shell in the shape of the complete or multi-part partial mandrel internal surface resulting in a hollow or partially hollow nickel product.

IPC 8 full level

C23C 16/16 (2006.01); **B22D 23/00** (2006.01); **C23C 16/01** (2006.01); **C23C 16/04** (2006.01); **C23C 16/44** (2006.01); **C23C 16/46** (2006.01); **C23C 16/52** (2006.01)

CPC (source: EP US)

C23C 16/01 (2013.01 - EP US); **C23C 16/16** (2013.01 - EP US)

Citation (search report)

- [XY] WO 0171056 A2 20010927 - PRATT & WHITNEY CANADA [CA]
- [XAY] US 3175259 A 19650330 - ROBERT BREINING ELMER, et al
- [Y] US 5169549 A 19921208 - WEBER REINHART [CA]
- [AY] US 6132518 A 20001017 - MILINKOVIC MIROSLAV [CA], et al
- [A] US 6007634 A 19991228 - WEBER RHEINHART [CA], et al
- [A] EP 0713755 A2 19960529 - TUHH TECH GMBH [DE]
- [A] US 5591485 A 19970107 - WEBER REINHART [CA], et al
- See references of WO 2005014879A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL HR LT LV MK

DOCDB simple family (publication)

CA 2437343 A1 20050208; CN 1833049 A 20060913; EP 1664372 A1 20060607; EP 1664372 A4 20080910; JP 2007501897 A 20070201; US 2005028958 A1 20050210; US 7108041 B2 20060919

DOCDB simple family (application)

CA 2437343 A 20030808; CN 200480022799 A 20040806; EP 04761632 A 20040806; JP 2006522191 A 20040806; US 79924004 A 20040312